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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,662	10/17/2000	Duane A. Erwin	Hoeft-001017	3465
7590	04/15/2004			EXAMINER
Albert W. Watkins Quill & Disc Incorporated 30844 NE 1st Avenue St. Joseph, MN 56374			RAMAKRISHNAIAH, MELUR	
			ART UNIT	PAPER NUMBER
			2643	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/690,662	Applicant(s) Duane A. Erwin
	Examiner Melur. Ramakrishnaiah	Art Unit 2643
		
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --		
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Oct 17, 2000</u>		
2a) <input type="checkbox"/> This action is FINAL. 2b) <input checked="" type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.		
Disposition of Claims		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-25</u> is/are pending in the application.		
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input checked="" type="checkbox"/> Claim(s) <u>1-25</u> is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.		
Application Papers		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action.		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
*See the attached detailed Office action for a list of the certified copies not received.		
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.		
15) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)		
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>3</u>		
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____		
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
6) <input type="checkbox"/> Other: _____		

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Parke (US PAT: 4,035,589) in view of Long et al. (US PAT: 6,522,754 B1, filed 8-11-1998, hereinafter Long).

Regarding claim 1, Parke discloses an electrical audio processing system for processing a plurality of electrical source signals and converting the plurality of electrical source signals into an audio broadcast , the electrical audio processing system transported by a vehicle having an interior compartment surrounded by a vehicle exterior which protects the interior compartment from the vagaries of moisture, mud, dirt, and debris, during transport, comprising: a means for providing electricity to the electrical audio processing system (col. 2 lines 20-23), a means for selecting at least one input signal from the plurality of electrical source signals (col. 1 lines 58-62, col. 3 lines 48-51), a means (34; fig. 1) for dividing at least one input signal into plurality frequency separated output components, a means for converting a first one of the plurality of frequency segregated output components into low frequency audible sound wave (col. 2 lines 53-61).

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Parke differs from the claims 1, 5, 6, in that he does not teach the following: a means for selectively conducting low frequency audible sound wave from the converting means through the vehicle exterior in a first direction while attenuating frequencies other than the low frequencies.

However, Long teaches the following: a means for selectively conducting low frequency audible sound wave from the converting means through the vehicle exterior in a first direction while attenuating frequencies other than the low frequencies (fig. 3, col. 3 lines 61-67, col. 4 lines 1-5).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Parke's system to provide for the following: a means for selectively conducting low frequency audible sound wave from the converting means through the vehicle exterior in a first direction while attenuating frequencies other than the low frequencies as this arrangement would facilitate broadcasting information through an external speaker system suitable for the user needs as taught by Long.

Regarding claims 2-9, Parke further teaches the following: vehicle is self propelled by a self contained motive power system, the means for providing electricity comprises a means for inducing electricity from the self contained motive power system and means for distributing the induced electricity solely to the electrical audio processing system (this is implied in as much as reference teaches use of electric power for audio system and the system can be used in a mass subway system, col. 3 lines 26-29) , storing sufficient quantity of electricity of the induced electricity for powering the electrical audio processing system through broadcast of a coherent

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audio program without inducing electricity from the inducing means during the coherent audio program, (col. 2 lines 20-23), means for changing a second one of frequency segregated output components into high frequency audible sound wave of higher frequency higher than low frequency audible sound, and means for selectively conducting high frequencies with in the high frequency audible sound wave from the changing means through the vehicle , means for controlling amplifying means and selecting means from a remote location to control the selecting and amplifying (col. 3 lines 48-67, col. 4 lines 1-6, col. 3 lines 26-41), means for forming an electrical signal from an audible sound, and means for conveying the formed electrical signal to the selecting means to serve as one of plurality electrical source signals (col.3 lines 42-51), audible sound comprises a human voice, and the formed electrical signal is selected by the selecting means (52, fig. 1), whereby human voice is amplified and broadcast through the exterior to public areas (col. 3 lines 52-60).

3. Claims 11, 13-16, 17-18, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Parke in view of Long and Yokochi (JP409275595A).

Regarding claim 11, Parke further discloses full feature remote broadcast vehicle which is continuously setup and which is simultaneously secured against theft and vandalism in operation and while idle, comprising: a player (22, fig. 1) mounted within the vehicle for converting a prerecorded audio signal into a first electrical signal representative of the prerecorded audio signal, a broadcast receiver (40, fig. 1) mounted with in the vehicle which receives broadcast signals representative of an audio program and converts the broadcast signals into second electrical signal

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representative of audio program, a microphone (46, fig. 1) which transmits an electrical transmission signal, a microphone transmission receiver (40, fig. 1) mounted within the vehicle which receives the transmission signal and converts the microphone transmission signal into a third electrical signal, an electrical source mounted within in the vehicle for providing electrical energy (implied, col. 2 lines 20-23), a remotely controlled selector switch (34) mounted within the vehicle for selecting at least one of the electrical signal and passing the electrical signal through an output, a loud speaker mounted within the vehicle for converting the selector switch output to an audible sound wave, a remote control which receives human input from a point removed from the broadcast vehicle and responsive thereto variable controls the remotely controlled selector switch (34, col. 2 lines 53-68, col. 3 lines 46-68, col. 4 lines 1-6).

Parke differs from the claimed invention in that he does not explicitly teach the following: a port coupled from the loudspeaker system through the vehicle exterior which emanates the audible sound wave exterior to the vehicle in a first direction and which selectively enhances a narrow bandwidth of the low frequency audible sound wave.

However, Long discloses digital vehicle microphone system and method which teaches the following: a port coupled from the loudspeaker system through the vehicle exterior which emanates the audible sound wave exterior to the vehicle in a first direction (fig. 3, col. 3 lines 61-67, col. 4 lines 1-5) and Yokochi discloses sub-woofer box device which teaches the following: selectively enhances a narrow bandwidth of the low frequency audible sound wave (fig. 1, see abstract).

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Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Parke's system to provide for the following: a port coupled from the loudspeaker system through the vehicle exterior in a first direction as this arrangement would facilitate broadcasting information through an external speaker system suitable for the user needs as taught by Long, and which selectively enhances a narrow bandwidth of the low frequency audible sound wave as this arrangement facilitate reproduction low frequency sounds effectively as taught by Yokochi.

Regarding claims 17-18, Parke implicitly teaches the following: electrical power source comprises an electrical alternator which is isolated from an electrical system used by the vehicle for traffic signaling, battery mounted with in the vehicle for storing the electrical energy (this is implicit in as much as reference teaches use of electric power for audio system, col. 2 lines 20-23, and the system can be used with mass subway system, col. 3 lines 26-29).

Parke differs from claims 13-15, in that does not teach the following: port comprises a tuned port which selectively enhances a narrow low frequency bandwidth of the audible sound wave, additional tuned ports for coupling the additional audible sound waves through the vehicle exterior, second tuned port coupled from the converting means through the vehicle exterior which emanates low frequency audible sound wave exterior to the vehicle in a second direction different from the first direction.

However, Yokochi teaches the following: port comprises a tuned port which selectively enhances a narrow low frequency bandwidth of the audible sound wave, additional tuned ports for

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coupling the additional audible sound waves, second tuned port coupled from the converting means which emanates low frequency audible sound in a second direction different from the first direction (fig. 1, see abstract) and Long teaches the following: broadcasting audible sound waves through the vehicle exterior (col. 3 lines 61-67, col. 4 lines 1-5).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Parke's system to provide for the following: port comprises a tuned port which selectively enhances a narrow low frequency bandwidth of the audible sound wave, additional tuned ports for coupling the additional audible sound waves, second tuned port coupled from the converting means which emanates low frequency audible sound in a second direction different from the first direction as this arrangement facilitate reproduction low frequency sounds effectively as taught by Yokochi, and broadcasting audible sound waves through the vehicle exterior as this arrangement would facilitate broadcasting information through an external speaker system suitable for the user needs as taught by Long.

Regarding claim 16, Parke does not teach the following: up-link mounted within the vehicle for transmitting the selector switch output to a central broadcast facility for further retransmission therefrom, broadcast receiver comprises broadcast radio receiver.

However, Long teaches the following: up-link mounted within the vehicle for transmitting the selector switch output to a central broadcast facility for further retransmission therefrom, broadcast receiver comprises broadcast radio receiver (col. 4 lines 53-60).

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Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Parke's system to provide for the following: up-link mounted within the vehicle for transmitting the selector switch output to a central broadcast facility for further retransmission therefrom, broadcast receiver comprises broadcast radio receiver as this arrangement would facilitate communication of information to an external system as taught by Long, thus providing additional functionality to the system which is useful for the user.

4. Claims 12 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Parke in view of Long and Yokochi as applied to claim 11 above, and further in view of Fujita (JP409204191A).

Regarding claims 12 and 21, the combination does not teach the following: infra-red communication link between the remote control and the remotely controlled switch, microphone transmission receiver receives the electrical transmission signal through at least two reception paths.

However, Fujita discloses parking lot type multimedia device which teaches the following: infra-red communication link between the remote control and the remotely controlled switch, microphone transmission receiver receives the electrical transmission signal through at least two reception paths (fig. 1, see abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: infra-red communication link

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between the remote control and the remotely controlled switch, microphone transmission receiver receives the electrical transmission signal through at least two reception as this arrangement would facilitate the user to communicate audio through wireless system with remote control for facilitating the user to enjoy the audio as taught by Fujita, thus facilitating user convenience.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parke in view of Long as applied to claim 8 above, and further in view of Fujita.

Regarding claim 10, the combination does not teach the following: forming and conveying means comprises a diversity wireless microphone.

However, Fujita teaches the following: forming and conveying means comprises a diversity wireless microphone.

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: forming and conveying means comprises a diversity wireless microphone as this arrangement would facilitate the user to communicate audio through wireless system with remote control for facilitating the user to enjoy the audio as taught by Fujita, thus facilitating user convenience.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parke in view of Long and Yokochi as applied to claim 11 above, and further in view of Kowalczyk (US PAT: 5,862,235).

Regarding claim 19, the combination does not teach the following: the player is selected from a CD player, a tape player and DVD player.

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However, Kowalczyk discloses multiple broadcast channel transmitter arrangement which teaches the following: the player is selected from a CD player, a tape player (col. 2 lines 34-44).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify the combination to provide for the following: the player is selected from a CD player, a tape player and DVD player as this arrangement would facilitate the user to select music players of his choice as taught by Kowalczyk, thus enhancing user convenience.

7. Claims 22-25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US PAT: 5,546,273) in view of Kageyama (JP361234195A) and Long.

Regarding claim 22, Harris discloses the combination of speaker for converting electrical signals to audible sounds and vehicle having an exterior body forming an enclosed space within the vehicle having an exterior body forming an enclosed space within the vehicle and having access to portals through which a human body may pass for entry into the enclosed space and exit therefrom, wherein the improvement comprises: a cross-over for dividing the electrical signals into a low frequency component and a high frequency component of relatively higher frequency than low frequency component (col. 12 lines 11-28), speaker housing enclosing the speaker (col. 3 lines 28-34).

Harris differs from claims 22-25 in that he does not teach the following: speaker housing blocking emanation of audible sounds directly from the speaker into an ambient exterior to speaker housing, and a tuned port for selectively transmitting a limited bandwidth of the audible sounds from the encloses space through the exterior vehicle body, a second tuned port for

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selectively transmitting a limited bandwidth of the audible sound from the enclosed space through the exterior of the vehicle body, second tuned port transmits the audible sounds in a direction different from the first tuned port, a third tuned port for selectively transmitting a limited bandwidth of the audible sound from enclosed space through the exterior vehicle body in a direction from the first and second tuned ports.

However, Kageyama discloses speaker system which teaches the following: speaker housing blocking emanation of audible sounds directly from the speaker into an ambient exterior to speaker housing, and a tuned port for selectively transmitting a limited bandwidth of the audible sounds from the encloses space through the exterior, a second tuned port for selectively transmitting a limited bandwidth of the audible sound from the enclosed space through the exterior, second tuned port transmits the audible sounds in a direction different from the first tuned port (fig. 1, see abstract) and Long teaches transmitting a limited bandwidth of the audible sound from enclosed space through the exterior vehicle body (col. 5 lines 66-67, col. 6 lines 1-7)/

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Harris' system to provide for the following: speaker housing blocking emanation of audible sounds directly from the speaker into an ambient exterior to speaker housing, and a tuned port for selectively transmitting a limited bandwidth of the audible sounds from the encloses space through the exterior, a second tuned port for selectively transmitting a limited bandwidth of the audible sound from the enclosed space through the exterior, second tuned port transmits the audible sounds in a direction different from the first tuned port as this

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arrangement facilitate reproduction low frequency sounds effectively as taught by Kageyama, and Long teaches transmitting a limited bandwidth of the audible sound from enclosed space through the exterior vehicle body as this arrangement would facilitate broadcasting information through an external speaker system suitable for the user needs as taught by Long.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (703) 305-1461. The examiner can normally be reached on Monday to Friday from 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708. The fax phone number for this Group is (703) 305-9508.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

9. **Any response to this action should be mailed to:**

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Washington, D.C. 20231

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or faxed to:

(703) 308-6306, (for formal communications intended for entry)

Or:

(703) 305-9508 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).



Melur. Ramakrishnaiah
Melur. Ramakrishnaiah

PRIMARY EXAMINER

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